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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,458	07/22/2004	Jas Pal Badyal	06275-408US1	3687

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EXAMINER
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ZACHARIA, RAMSEY E

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/502,458

Applicant(s)

BADYAL ET AL.

Examiner

Ramsey Zacharia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-7 and 9-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 9-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 103***

2. Claims 1, 3-7, and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warby (WO 99/42154 A1) in view of Badyal et al. (WO 98/58117 A1).

Warby teaches an apparatus for dispensing a medicament wherein one or more of the internal surfaces of the apparatus are coated with cold plasma polymerized monomers (page 2, line 33-page 3, line 5). The coating may be applied to the powder storage chamber (i.e. can), stem, valve (i.e. actuator), seals, and other devices such as non-pressurized actuators (page 8, line 10-page 9, line 11). Suitable monomers include fluorinated monomers, such as perfluorocyclohexane, perfluorohexane, tetrafluoroethylene, trifluoroethylene, vinylidene fluoride, vinyl fluoride, and fluorinated ethylene/propylene (page 7, lines 14-26).

Warby does not teach the use of a fluorinated acrylate.

Badyal et al. teach an oil and water repellent coating designed to prevent or inhibit soiling (page 1, lines 6-12). The degree of repellency is a function of the number and length of fluorocarbon groups (page 1, lines 19-23). The coating may be applied to biomedical devices (page 10, lines 9-14). The coating may be formed from a fluoroacrylates, such as 1H, 1H, 2H, 2H heptadecafluorodecyl acrylate (see Example 3).

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It would be obvious to one skilled in the art to use the monomer of Badyal as the fluorinated monomer in the coating of Warby because the coating of Badyal et al. serves the same purpose as that of Warby (i.e. a repellent coating for biomedical devices) and it is *prima facie* obvious to select a known material based on its suitability for its intended use. See MPEP 2144.07. Moreover, because the specific fluoroacrylate used by Badyal et al., 1H, 1H, 2H, 2H heptadecafluorodecyl acrylate, has a longer fluorinated chain than the specific monomers disclosed in Warby, one skilled in the art would be further motivated to use the monomer of Badyal et al. to improve the repellency since Badyal et al. teach that the degree of repellency is a function of the length of the fluorocarbon groups.

Regarding claims 7 and 13, the particular drug for which the device is intended to be used is a limitation drawn to the intended use of the device. Since, it has been held that a recitation with respect to the manner in which a claimed product is intended to be employed does not differentiate the claimed product from a prior art product satisfying the claimed structural limitations, the article of Vernon, JR et al. reads on the device of instant claim 7. See MPEP 2114.

### ***Response to Arguments***

3. Applicant's arguments filed 18 September 2006 have been fully considered but they are not persuasive.

The applicants argue that there is no motivation for combining Warby and Badyal et al. and that one skilled in the art would have no expectation of success in substituting the compound of Badyal et al. for those used in Warby. The applicants contend that the purposes served by the

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coatings of Warby and Badyal et al. are not the same - the coating of Warby is intended to inhibit drug deposition while the coating of Badyal et al. is intended to impart oil and water repellency. The applicants further contend that at most Badyal et al. suggest that increasing chain length increases only oil and water repellency.

This is not persuasive for the following reasons. Warby explicitly refers to the cold plasma polymerization coating as a "hydrophobic" treatment (see page 7, lines 5-13), i.e. a water repellent treatment. Therefore, one skilled in the art would be motivated to look to other hydrophobic treatments, such as the water repellent, cold plasma deposited coating of Badyal et al. One skilled in the art would have a reasonable expectation of success in substituting the compound of Badyal et al. for those used in Warby since the coating of Badyal et al. provides water repellency and the coating of Warby is described as a hydrophobic treatment. Furthermore, one skilled in the art would expect the monomers of Badyal et al., which have longer fluorinated groups than those of Warby, to provide an improved inhibition of drug deposition because they would be expected to provide improved water repellency and thus constitute a more hydrophobic treatment.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**


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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (571) 272-1518. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached at (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Ramsey Zacharia**  
Primary Examiner  
Tech Center 1700